

In The Claims

Please amend claims as follows.

1. (Currently Amended) A controlling device of a compressor, comprising:

a commercial power source;

a motor, for driving a compressor mechanism;

an inverter circuit, for converting a commercial frequency to a driving frequency, to control the motor; and

a noise filter, arranged at an input of the inverter circuit, for suppressing a common mode noise of the commercial power source and the inverter circuit, and connected to a ground through a metal frame used for receiving a compressor main body, ~~and wherein the noise filter further comprises first capacitors, connected between AC power lines; second capacitors, connected among the AC power lines in series; and common mode reactor coils, connected among the first capacitors and the second capacitors; and~~

a leakage current suppressing circuit, having a clamper for clamping a voltage, and connected between nodes of the second capacitors and the metal frame,

wherein in the noise filter, one end of each second capacitor is connected to an AC power line through a corresponding common mode reactor coil, and the other end of the each second capacitor is connected to the leakage current suppressing circuit, and each of the first capacitors is connected between two of the AC power lines.

2. (Original) The controlling device of claim 1, wherein the clamper in the leakage current suppressing circuit is formed by opposite connected Zener diodes.

3. (Original) The controlling device of claim 2, wherein a Zener voltage of the Zener diode is set within a range from 10V to 30V.

4. (Currently Amended) A controlling device of a compressor, comprising:

a commercial power source;

a motor, for driving a compressor mechanism;

an inverter circuit, for converting a commercial frequency to a driving frequency, to control the motor; and

a noise filter, arranged at an input of the inverter circuit, for suppressing a common mode noise of the commercial power source and the inverter circuit, and connected to a ground through a metal frame used for receiving a compressor main body, ~~and wherein the noise filter further comprises first capacitors, connected between AC power lines; second capacitors, connected among the AC power lines in series; and common mode reactor coils, connected among the first capacitors and the second capacitors; and~~

a leakage current suppressing circuit, having a clamper for clamping a voltage, connected between nodes of the second capacitors and the metal frame; and a third capacitor, connected to the clamper in parallel;

wherein in the noise filter, one end of each second capacitor is connected to an AC power line through a corresponding common mode reactor coil, and the other end of the each second capacitor is connected to the leakage current suppressing circuit, and each of the first capacitors is connected between two of the AC power lines.

5. (Original) The controlling device of claim 4, wherein the clamper in the leakage current suppressing circuit is formed by opposite connected Zener diodes.

6. (Original) The controlling device of claim 5, wherein a Zener voltage of the Zener diode is set within a range from 10V to 30V.

7. (Original) The controlling device of claim 4, wherein the capacitance of the third capacitor is set within a range from 470pF to 10000pF.